

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 5-15, 17, 18, 20, 24 and 25 have been canceled.

Claims 1-4, 16, 19, 21-23 have been amended as follows:

1. (AMENDED) A fluid dispenser for dispensing a fluid onto a substrate comprising:
 - a dispensing valve movable between open and closed positions for controlling a flow of the fluid from said fluid dispenser;
 - 5 a solenoid, the operation of said solenoid being effective to cause said dispensing valve to move between the open and closed positions;
 - a power supply having an output voltage; and
 - 10 a driver circuit electrically connected to said solenoid and said power supply and providing an output signal to said solenoid having [a time variable component determined by] an initial peak current with a variable duration followed by a hold current, the duration of said initial peak current varying as a function of the output voltage of said power supply.
2. (AMENDED) The fluid dispenser of claim 1 wherein said driver circuit [provides the output signal with a time variable component] automatically varies the duration of said initial peak current [varying] as a function of the output voltage of said power supply.
3. (AMENDED) The fluid dispenser of claim 2 wherein said driver circuit [provides the output signal with a time variable component having a duration] automatically varies the duration of said initial peak current [varying] as an inverse function of a magnitude of the output voltage of said power supply.
4. (AMENDED) The fluid dispenser of claim 1 further comprising a peak current duration control connected to said power supply and providing a signal varying as a [3 wherein said waveform generator provides a waveform signal having an initial peak current with a variable duration followed by a hold current to energize said solenoid, and said waveform generator provides the initial peak current with a duration determined as an inverse] function of the output voltage of said power supply.

16. (AMENDED) A method of operating a fluid dispenser for dispensing a fluid onto a substrate, the fluid dispenser having a dispensing valve being movable between open and closed positions for controlling a flow of the fluid from the fluid dispenser, a solenoid having a coil in electromagnetic communication with an armature being movable through a displacement by energizing the coil, the operation of the solenoid being effective to cause the dispensing valve to move between the open and closed positions; the method comprising:

providing a power supply having a voltage;

producing an output signal having an initial peak current with a variable duration followed by a hold current, the duration of the initial peak current varying [a time variable component determined] as a function of the voltage of the power supply; and

applying the output signal to the coil of the solenoid, thereby automatically changing the operation of the dispensing valve as a function of the voltage of the power supply.

19. (AMENDED) A method of operating an electrically operated fluid dispenser for dispensing a fluid onto a substrate, the fluid dispenser having a dispensing valve operatively connected to an electrically operated solenoid, the dispensing valve being movable between open and closed positions for controlling a flow of the fluid from the fluid dispenser, the method comprising:

providing a power supply having a voltage;

producing an output signal having an initial peak current with a variable duration followed by a hold current, the duration of the initial peak current varying [a time variable component determined] as a function of the voltage of the power supply; and

applying the output signal to the electrically operated solenoid, thereby automatically changing the operation of the dispensing valve as a function of the voltage of the power supply.

21. (AMENDED) The method of claim 19 [20] further comprising producing the initial peak current with a duration varying as an inverse function of the voltage of the power supply.

22. The method of claim 19 [20] further comprising:

producing a feedback signal representing current in the solenoid;

and

producing the hold current as a function of the feedback signal.

23. (AMENDED) A method of operating an electrically operated fluid dispenser for dispensing a fluid onto a substrate, the fluid dispenser having a dispensing valve operatively connected to an electrically operated solenoid, the dispensing valve being movable between open and closed positions for controlling a flow of the fluid from the fluid dispenser, the method comprising:

- 5 producing a first output signal having an initial peak current with a variable duration followed by a hold current, the duration of the initial peak current varying [a time variable component determined] as a function of a first nominal voltage of a first power supply connectable to the fluid dispenser;
- 10 applying the first output signal to the solenoid;
- producing a second output signal having an initial peak current with a variable duration followed by a hold current, the duration of the initial peak current varying [a time variable component determined] as a function of a second nominal voltage of a second power supply connectable to the fluid dispenser in place of the first power supply; and
- 15 applying the second output signal to the solenoid.